

## **TITLE OF THE INVENTION**

**THREE-DIMENSIONAL ARTIFICIAL FLOWERS, THREE-DIMENSIONAL ARTIFICIAL  
PETALS, THREE-DIMENSIONAL ARTIFICIAL BUDS, THREE-DIMENSIONAL  
ARTIFICIAL LEAVES**

## **CROSS REFERENCE TO RELATED APPLICATIONS**

### **U.S. Patent Documents**

4708892      November 1987

3822171      July 1974

## **BACKGROUND OF THE INVENTION**

### **Field of the Invention**

This invention relates to a creation of a new version of three-dimensional artificial flowers as described herein. Specifically, the methods of constructing each individual petal, bulb of flower, bud and leaf are used so that the resulting artificial flowers will possess the three-dimensional characteristic that current artificial flowers in the market lack. Additionally, this invention focuses on the use of new and technologically advanced materials such as the stretchable nylon fabric of various colors and patterns available in the market to create a three-dimensional artificial flowers, three-dimensional artificial petals, three-dimensional artificial buds, and three-dimensional artificial leaves of more durable, life-like, beautiful, non-opaque, airy, and lightweight of various colors, patterns, and shapes.

### Discussion of the Prior Art

While numerous imitation flowers have been provided in prior art, for instance, U.S. Patent Numbers 3,822,171 and 4,708,892, none has focused on or discussed the method or the process of making or creating three-dimensional artificial flowers, three-dimensional artificial petals, three-dimensional artificial buds, and/or three-dimensional artificial leaves.

### BRIEF SUMMARY OF THE INVENTION

Given that the artificial flowers, artificial petals, artificial buds, and artificial leaves in the market today appear flat looking as they are basically of a two-dimensional appearance, the main objective of this invention is to create non-opaque three-dimensional artificial flowers comprising of three-dimensional artificial petals, three-dimensional artificial buds, and three-dimensional artificial leaves that are more durable, life-like, beautiful, distinctive, airy, and lightweight using lightweight wire, stretchable, thin, see-thru nylon fabric of various colors and patterns, thread, glue and floral tape.

A further objective is to utilize this invention in various fields of the art including but not limited to the making of bouquets, reeds, plants, tiaras, and pins using the three-dimensional artificial flowers, three-dimensional artificial petals, three-dimensional artificial buds, and three-dimensional artificial leaves concept.

### BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS

FIG. 1A and FIG. 1B illustrate a flexible lightweight strand like wire being twisted into a spring and/or coil like shape and then bent over to make a loop of wire.

FIG. 2A and FIG. 2B illustrate one or more pieces of curved lightweight strand like wire running from the base of the wire loop to catch any other part of the wire loop to serve as an inner reinforcement.

FIG. 3A and FIG. 3B illustrate the side view of the loops of wire which have been curved and twisted.

FIG. 4A, FIG. 4B, and FIG. 4C illustrate the loops of wire being totally covered with stretchable synthetic fabric to form individual petals of three-dimensional characteristic. The petals shown having two layers of fabric being separated either by the support it received from the inner reinforced wires or by the uneven and curved edges.

FIG. 5A and FIG. 5B illustrate the three-dimensional artificial flowers comprising of a number of three-dimensional artificial petals of differing shape and size and with or without stamen.

FIG. 6A and FIG. 6B illustrate a bud structure created by two loops of wire and its cross sectional area yielding its three-dimensional characteristic.

FIG. 7A and FIG. 7B illustrate leaf structures with or without inner reinforced wire that create three-dimensional characteristics.

## **DETAILED DESCRIPTION OF THE INVENTION**

### **Step One: Creation of Petals of Three Dimensions**

A petal can be created by using a piece of thin flexible wire or stranded wire to form into a loop of wire whereby both ends of the wire are twisted together to form a base of the loop of wire. The creation of a petal of three dimension requires further a loop having a three-

dimensional structure which can be achieved via various techniques of construction including but not limited to:

1. Twisting a piece or more of thin, flexible, lightweight wire or strand of wire into a spring or coil like shape and then forming it into a loop of wire, as shown in 1 in FIG. 1A and FIG. 1B. This spring or coil like shape or curly shape of the loop of wire is the foundation of the three-dimensional characteristic of the petal formation.
2. Using one or multiple pieces of curved wire, as shown in 3 in FIG. 2A and FIG. 2B to connect the base of the loop of wire to any other section of the loop of wire as inner reinforcement to the loop but more significantly such addition of the curved wire creates the three-dimensional structure as required by the formation of the three-dimensional artificial petal.
3. Bending the loop of wire as shown in 1 in FIG. 3A and FIG. 3B to generate a dome like shape or any other curved like shape will create a three-dimensional structure as required by the formation of the petal of three dimensions.

Once the above loops of wire are constructed as described in items 1, 2 and 3 above, a piece of stretchable, thin, see-thru synthetic fabric as shown in 2a and 2b of FIG. 4A made of such material as nylon filaments combining with spandex fibers or any elastic fibers of differing colors must be tautly stretched over the entire loop of wire. The ends of the stretchable fabric are then gathered and tied securely to the base of the loop as shown in 4 in FIG. 4A, FIG. 4B, and FIG. 4C utilizing a piece of thread, wire, floral tape or like materials.

FIG. 4A shows an upper portion of the fabric in 2a being supported by a curly or uneven curve of the wire loop section in 1 of FIG. 4A while the lower portion of the fabric as shown in

2b is being separated and kept apart from the upper portion of the fabric thereby generating and creating the three-dimensional characteristic of the petal and providing a cavity like structure within the artificial petal.

FIG. 4B shows an upper portion of the fabric in 2a being supported by inner reinforced curved wires as shown in 3 of FIG. 4B that connects the base of the loop to the upper portion of the loop resulting in the upper portion of the fabric in 2a being separated from the lower portion of the fabric in 2b resulting in the three-dimensional characteristic of the petal and providing a cavity like structure within the artificial petal.

FIG. 4C shows an upper portion of the fabric in 2a rests above and away from the lower portion of the fabric in 2b as a result of the use of a dome like shape or any other curved like shape of the wire loop to generate the desired three-dimensional characteristic of the petal and providing a cavity like structure within the artificial petal.

Hereby, petals of three-dimensional characteristic are created.

#### **Step Two: Creation of Three-Dimensional Artificial Flowers**

A three-dimensional artificial flower is comprised of a number of three-dimensional artificial petals with or without an artificial stamen or a set of artificial stamens. The three-dimensional artificial petals used in this construction can be of differing shape, size, structure, and color as deemed appropriate. Additionally, in the case where the petal's fabric comes in solid color, a marker or a color pen can be used to mark or draw in the desired pattern to enhance the beauty, colorfulness, and the life-like quality of the finished three-dimensional artificial flower.

The procedure for combining the three-dimensional petals into a three-dimensional artificial flower with or without stamen is as follows:

1. Where no stamen is used, the first petal should be affixed securely to an artificial stem which is a piece of rigid rod of varying size, length, thickness, and color by using a piece of thread or wire, glue, or other binding materials including floral tapes. Once the first petal is properly secured to the stem, the remaining petals are to be added one at a time using the procedure outlined above until all of the remaining three-dimensional artificial petals are affixed to the artificial stem to form a three-dimensional artificial flower as shown in FIG. 5A.
2. Where a stamen or a set of stamen is used, the stamen should first be affixed securely to the artificial stem by means including but not limited to the use of pieces of thread or wire, glue, or other binding materials including floral tape. The first three-dimensional petal, along with the remaining three-dimensional petals, can then be affixed to the artificial stem one by one in the same manner as above. Thus creating an artificial flower of three-dimensional appearance as shown in FIG. 5B.

### **Step Three: Creation of Three-dimensional Artificial Buds**

An artificial bud is made from twisting and bending two or more thin, bendable, and flexible pieces of wire or strand of wire to form the connecting top as shown in 1 in FIG. 6A of the loops of wire with both ends as shown in **a** and **b** of FIG. 6A being brought down and twisted together to form a combining base as shown in 4 in FIG. 6A. Such shape is unique as it created a cavity inside the bud as shown in 5 in FIG. 6B thereby creating and generating a three-dimensional structure. To complete the bud, the whole structure is then covered with a piece of stretchable, thin, lightweight, and see thru synthetic fabric with the ends being gathered and tied securely to the base of the bud to form a three-dimensional characteristic of the bud as shown in

4 of FIG. 6A and its cross section as shown in FIG. 6B. The three-dimensional artificial bud is then affixed to the artificial stem employing the same procedure as outlined in step two.

#### **Step Four: Creation of Three-Dimensional Artificial Leaves**

Three-dimensional artificial leaves are made using the similar method of construction as outlined in the creation of the three-dimensional artificial petals in step one. As aforementioned, a piece of thin, flexible, and lightweight wire or strand of wire can be used to construct a loop of wire. The stretchable, lightweight, and see-thru nylon fabric is then used to cover the entire loop of wire with its ends being gathered and secured to the base of the loop of wire utilizing the aforementioned technique. Additionally, the bending and curving of the loops of wire as shown in 1 in FIG. 7A and the use of inner reinforced wire as shown in 3 in FIG. 7B inside the loop in making the artificial leaves serve to enhance the three-dimensional structure of the artificial leaves since such processes allow the upper portion as shown in 2a of FIG. 7B of the fabric to rest above and away from the lower portion of 2b of the fabric thereby creating cavity like structures within the three-dimensional artificial leaves.

#### **Step Five: The Creation of A Pin Utilizing the Three-Dimensional Artificial Flower**

In making a pin using the three-dimensional artificial flower, there is no need to tie the ends of the loops of wire or the bases of the three-dimensional artificial petals to an artificial stem. Rather, the end of the flexible lightweight wire coming from each of the petals and the artificial stamen should be gathered and secured together using threads and multiple wrapping of floral tape. A pin or a clip should then be affixed on to the area. In order to increase durability, the pin or clip should be stitched in using the threads, glue should be added, and multiple wrapping of floral tape should also be applied.